CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 00-086

NPDES NO. CA0037770
REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

MT. VIEW SANITARY DISTRICT
MARTINEZ, CONTRA COSTA COUNTY

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The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

1. The Mt. View Sanitary District, hereinafter called the Discharger, submitted a Report of Waste Discharge for reissuance of waste discharge requirements and a permit to discharge wastewater to waters of the State and the United States under the National Pollutant Discharge Elimination System (NPDES).

2. The Discharger owns and operates the Mt. View Sanitary District wastewater treatment plant, located at the end of Arthur Road near the City of Martinez in Contra Costa County.

PURPOSE OF ORDER

3. This NPDES permit regulates the discharge of treated wastewater to a constructed marsh, Peyton Slough, and adjacent marshes. Flow from Peyton Slough enters Carquinez Strait and Suisun Bay near the Benicia Bridge. The discharge is presently governed by Waste Discharge Requirements in Order No. 93–001, adopted by the Board on January 20, 1993.

4. The U.S. Environmental Protection Agency (USEPA) and the Board have classified this discharge as a major discharge.

FACILITY DESCRIPTION

5. The Discharger's wastewater treatment plant has capacity to provide advanced secondary level treatment for approximately 3.2 million gallons per day (mgd) of domestic, commercial, and light industrial wastewater from a portion of Contra Costa County in the vicinity of Martinez. The plant presently discharges an average dry weather flow of about 1.8 mgd, an annual wet weather flow of 2.5 mgd, and an annual average effluent flow of 2.0 mgd. The Discharger's service area currently has a population of approximately 24,000 people.

6. The wastewater treatment system uses innovative treatment technology and includes screening, flow equalization, primary sedimentation, biological treatment by a high-rate trickling filter, nitrification in a biotower, secondary sedimentation, sand filtration, and disinfection with ultraviolet (UV) light. During wet weather, both clarifiers are used for primary sedimentation and secondary sedimentation is provided by the sand filters. The use of chlorine has been completely eliminated at the plant.

   Since the addition of the filtration and UV disinfection system that went into operation in November 1994, the District has been the recipient of the California Water Environment Association San Francisco Bay Section 1995, 1996 and 1998 Treatment Plant of the Year Award, 1995 Engineering Achievement Award, and the 1996 Public Education Award. The District also received the 1996 California Water Environment Association State Award for Public Education.

7. Sludge is digested, then dewatered by a belt press. Further sludge volume reduction occurs in drying beds located at the treatment plant. Drainage and runoff from the sludge drying beds are collected in a sump and pumped back to the headworks of the treatment plant. Sludge is presently used as a soil amendment by Future Tech Environmental Services at the Byron Hot Springs golf course site and as alternative daily cover at the BFI Vasco Road Landfill in Livermore.

8. The Discharger also owns and operates an existing sewage collection system comprising approximately 100 miles of public sewer pipelines ranging in diameter from 6 to 24 inches. The collection system also includes four pump stations: Arthur Road No. 1 Pump Station, Austen Way No. 2 Pump Station, Arnold Drive No. 3 Pump Station and Morello Road No.4 Pump Station. Three of the four pump stations have been upgraded as was recommended in its 1986 Long Range Plan. These pump stations, along with the entire sewage collection system, require ongoing maintenance and upgrades as necessary to accommodate wet weather flows. The Discharger is responsible for the operation and maintenance of the collection system contributing to the treatment plant and is responsible for any sewage spill/overflow from the system, as noted above.

9. General quality of the effluent discharged from the plant during the past few years, based on general information provided by the application and self-monitoring reports, is as follows:

Constituents	Annual Average
Biochemical Oxygen Demand (BOD), mg/l	6
Total Suspended Solids (TDS), mg/l	8
Settleable Matter, mg/l/hr	<0.1
Ammonia, mg/l	<1.0

10. The wet weather flow for the peak day in recent years has been as high as 7.5 mgd. All peak flows receive secondary treatment as described above.

MARSH HABITAT

11. The Discharger owns and manages a total of 89 acres of constructed marshland (consisting of open marsh ponds and marsh habit). The Discharger's effluent enters the constructed marshland west of Interstate 680, then flows to Peyton Slough and combines with surface runoff to supply the downstream 137 acres of natural marshland east of Highway I-680. Flows from this marshland then re-enter Peyton Slough and ultimately reach the Carquinez Straits. The constructed marshland, adjacent natural marsh habitat, and Peyton Slough provide habitat for a variety of plant and animal species. The total marsh system is described below:

    Constructed Marshland

    The treated wastewater is discharged directly into the interconnecting marsh ponds constructed and managed by the Discharger (Latitude 38 Deg., 01 Min., 12 Sec.: Longitude 122 Deg., 05 Min., 47 Sec. These three interconnected marsh ponds straddle Peyton Slough. Effluent from the constructed marshland system is discharged to Upper Peyton Slough over Weir B.

    Upper Peyton Slough

    Upper Peyton Slough runs downstream of the District's constructed marshland, under Highway I-680 and through McNabney Marsh. Various control structures allow management of the water in Upper Peyton Slough so that adjacent marshes can be flooded when desired. Upper Peyton Slough is separated from Lower Peyton Slough by a pumping and tide gate structure maintained by the Contra Costa County Mosquito and Vector Control District.

    McNabney Marsh

    The McNabney Marsh is a marsh habitat area located on the east side of Highway I-680 and north of Waterfront Road that straddles Upper Peyton Slough. The Discharger owns the northerly 68 acres and the East Bay Regional Parks District owns the southerly 69 acres of this marsh, as well as the upland area to the east. The McNabney Marsh is managed to maximize habitat values (see Attachment A).

    Lower Peyton Slough

    Lower Peyton Slough runs northerly from the pumping and tide gate structure and connects to Carquinez Straight at Bull Head Point, about 1.5 miles from the treatment plant. The entire Peyton Slough watershed encompasses 3.5 square miles and includes the Shell Oil Refinery, the easterly portion of Martinez and the communities of Mt. View and Vine Hill.

12. During the winter, Peyton Slough receives storm water runoff from the surrounding area. During the dry weather months, Peyton Slough receives freshwater flow primarily from the marsh system. Minor flows from the Contra Costa Canal into Peyton Slough may occur during the dry season.

13. The Contra Costa Mosquito and Vector Control District rebuilt their tide gate structure at the downstream end of Upper Peyton Slough to enhance storm water drainage and, when necessary, to allow introduction of saline bay water into the lower wetland area at high tide. This occurs very infrequently, leaving the marsh system primarily a fresh water environment.

APPLICABLE PLANS, POLICIES AND REGULATIONS

14. The Board adopted a revised Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20 and November 13, respectively, of 1995. A summary of regulatory provisions is contained in Title 23 of the California Code of Regulations at Section 3912. The Basin Plan defines beneficial uses and water quality objectives for surface waters and groundwaters in the region, as well as effluent limitations and discharge prohibitions intended to protect beneficial uses. This Order implements the plans, policies and provisions of the Board's Basin Plan.

15. ***State Implementation Plan (SIP) and California Toxics Rule***: The State Water Resources Control Board (SWRCB) adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (also known as the State Implementation Plan or SIP) on March 2, 2000 and became effective on May 1, 2000. The SIP applies to discharges of toxic pollutants in the inland surface waters, enclosed bays and estuaries of California subject to regulation under the State's Porter-Cologne Water Quality Control Act (Division 7 of the Water Code) and the federal Clean Water Act. This policy also establishes the following: implementation provisions for priority pollutant criteria promulgated by the USEPA through the National Toxics Rule (NTR) and through the California Toxics Rule (CTR) and for priority pollutant objectives established by Regional Water Quality Control Boards (RWQCBs) in their water quality control plans (basin plans); monitoring requirements for 2, 3, 7, 8 –TCDD equivalents; and chronic toxicity control provisions. The CTR became effective on May 18, 2000.

BENEFICIAL USES

16. The Basin Plan contains water quality objectives and beneficial uses for the Carquinez Strait and contiguous waters. The beneficial uses of Upper Peyton Slough (upstream of the tide gate structure), the adjacent wetlands and constructed marsh include:

    Non-contact Water Recreation
    Wildlife Habitat
    Warm Freshwater Habitat

    The beneficial uses of Lower Peyton Slough, and Carquinez Strait (downstream of the tide gate structure) include:

    Navigation
    Non-contact Water Recreation
    Wildlife Habitat
    Preservation of Rare and Endangered Species
    Fish Migration and Spawning
    Estuarine Habitat
    Ocean, Commercial and Sport Fisheries

REGULATORY BASIS FOR EFFLUENT LIMITS AND DISCHARGE REQUIREMENTS

17. *Water Quality Objectives and Effluent Limits.* Water Quality Objectives (WQOs) and effluent limitations in this permit are based on the State Water Resources Control Board's "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California" (the State Implementation Plan or SIP); the plans, policies and water quality objectives and criteria of the 1995 Basin Plan, California Toxics Rule (Federal Register Volume 65, No. 97),

Quality Criteria for Water (EPA 440/5-86-001, 1986 and subsequent amendments "Gold Book"), applicable Federal Regulations (40 CFR Parts 122 and 131), National Toxics Rule (57 FR 60848, 22 December 1992; 40 CFR Part 131.36(b), "NTR"), National Toxics Rule Amendment (Federal Register Vol. 60, No. 86, 4 May 1995 pg. 22229-22237), and best professional judgment as defined in the Basin Plan. Where numeric effluent limitations have not been established in the Basin Plan, 40CFR122.44(d) specifies that water quality based effluent limits may be set based on USEPA criteria and supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

18. U.S. EPA guidance documents upon which BPJ was developed may include in part:

- Technical Support Document for Water Quality Based Toxics Control, March 1991;
- Region 9 Guidance For NPDES Permit Issuance, February 1994;
- Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria, October 1, 1993;
- Whole Effluent Toxicity (WET) Control Policy, July 1994;
- Draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-based Effluent Limitations set Below Analytical Detection Quantification Levels, March 18, 1994;
- National Policy Regarding Whole Effluent Toxicity Enforcement, August 14, 1995;
- Clarifications Regarding Flexibility in 40 CFR Part 136 Whole Effluent Toxicity (WET) Test Methods, April 10, 1996;
- Interim Guidance for Performance– Based Reductions of NPDES Permit Monitoring Frequencies, April 19, 1996;
- Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs, May 31, 1996;
- Draft Whole Effluent Toxicity (WET) Implementation Strategy, February 19, 1997.

DISCHARGE PROHIBITION EXCEPTION

19. The Basin Plan prohibits the discharge of wastewater which has characteristics of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of at least 10:1, or into any nontidal water, dead-end slough, similar confined waters, or any immediate tributaries thereof. Discharge of treated wastewater to the marsh and Peyton Slough is contrary to this prohibition.

20. The Basin Plan states that exceptions to the above prohibition will be considered for discharges where approved as part of a reclamation project; or where it can be demonstrated that net environmental benefits will be derived as a result of the discharge.

21. The Board has established policy and guidelines on the use of wastewater to create, restore, maintain and/or enhance marshlands in its Resolution No. 94-086.

22. The Discharger has demonstrated, according to the policy guidelines given in Resolution 94-086, that a net environmental benefit is derived as a result of discharge of up to an average dry weather flow of 3.2 mgd of treated wastewater to properly managed marsh ponds and marshlands. The Board finds that the marsh and wetlands management project implemented by the Discharger complies with the exception provision of the Basin Plan, and hereby grants an exception to the discharge prohibition for discharge of treated wastewater to the marsh and Peyton Slough.

The exception is also granted based on the provision that the Discharger has and will continue to provide ammonia removal (to maintain current levels of ammonia loading into Peyton Slough), and to continue to provide a net environmental benefit by managing 89 acres of marsh ponds and marshlands.

POLLUTION PREVENTION PROGRAM

23. The Discharger has implemented an aggressive Pollution Prevention program which has significantly reduced the influent concentrations of copper, lead, mercury, silver, and zinc. Activities completed by the Discharger included: a) inspected and permitted all known silver sources; b) conducted a study of background metals from sources; c) inspected all vehicle service facilities and permitted all non-zero discharge facilities; d) planned and participated in the development and implementation of Contra Costa Green Business Program targeting vehicle service facilities; e) developed an in-class pollution prevention program for schools; f) developed an on-site wetlands environmental education program for schools; g) participated financially in the planning and construction of a Household Hazardous Waste Collection Facility. This Order requires the Discharger to continue its efforts to maintain and reduce the loading of these metals to the marsh and Peyton Slough.

BASIS FOR EXISTING EFFLUENT LIMITS

24. ***Federal Water Pollution Control Act.*** Effluent limitations and toxic effluent standards are established pursuant to section 301 through 305, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharges herein

25. ***Applicable Water Quality Objectives*** **(WQOs).** The Basin Plan includes numeric WQOs as well as a narrative objective for toxicity in order to protect beneficial uses: "All waters shall be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses in aquatic organisms". Effluent limitations and provisions contained in this Order are designed to implement this objective, based on available information.

    The CTR promulgates numeric aquatic life criteria for 23 toxic pollutants, numeric human health criteria for 57 toxic pollutants and a compliance schedule which authorizes the State to issue schedules of compliance for new or revised NPDES permit limits based on the federal criteria when certain conditions are met.

26. ***Receiving Water Salinity.*** The receiving waters for the subject discharges are tidally influenced salt waters, with significant fresh water inflows during the wet weather season. The CTR states that the salinity characteristics (i.e., fresh water vs. marine water) of the receiving water shall be considered in establishing water quality objectives. Freshwater effluent limitations shall apply to discharges to waters with salinities lower than 1 part per thousand (ppt) at least 95 percent of the time. A tide gate is located in Peyton Slough near its confluence with the Carquinez Strait and Suisun Bay. Therefore, the Discharger's marsh, McNabney Marsh, the adjacent marshlands, and upper Peyton Slough are predominantly made up of fresh water, and the effluent limitations specified in this Order for discharge to the marsh and upper Peyton Slough are based on the fresh water objectives.

BASIS FOR REVISED EFFLUENT LIMITS

27. ***Water Quality Based Effluent Limitations*** **(WQBELs)**: Toxic pollutants are regulated in this permit by water quality standards based effluent limitations derived from water quality criteria listed in the Basin Plan Tables 3-3 and 3-4, the CTR, and the NTR.

28. ***303(d)-Listed Pollutants***. On May 12, 1999, the USEPA approved a revised list of impaired waterbodies prepared by the State. The list (hereinafter referred to as the 303(d) list) was prepared in accordance with section 303(d) of the federal Clean Water Act to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. Payton Slough is not listed as an impaired water body.

29. ***Basis for Effluent Limits for 303(d) Listed Pollutants:*** If a discharge causes, has a reasonable potential (RP) to cause, or contributes to a receiving water excursion above a narrative or numeric criteria within a State water quality standard, federal law and regulations, as specified in 40 CFR 122.44 (d) (1) (i), require the establishment of WQBELs that will protect water quality. Pollutants exhibiting RP in the discharge, authorized in this Order, are identified in the Reasonable Potential Analysis section. The Board plans to adopt TMDLs that will include Waste Load Allocations (WLAs) for the 303(d) listed pollutants. When each TMDL is complete, the Board will adopt a WQBEL consistent with the corresponding WLA. If authorized, a time schedule may be included in the revised permit to require compliance with the final WQBELs.

30. ***Interim Limits for 303(d) Listed Pollutants:*** In the interim, until either final WQBELs or WLAs are adopted for 303(d)-listed constituents, or a listed constituent is delisted, the 2000 SIP requires that the Board include interim effluent concentration limits that are either based on current performance or from the previous Order's concentration limit – whichever is lower - to ensure that the waterbody will not be further degraded. In addition to interim concentration limits, interim performance-based mass limits are included to limit the discharge of 303(d)-listed pollutants' mass loads to their current levels. These interim mass limits are based on recent discharge data and are determined for constituents that have a RP and are bioaccumulative.

31. **SHALLOW WATER DISCHARGE**

Discharge to the managed marsh, Peyton Slough and the adjacent marsh is into shallow water; the discharge is therefore classified by the Board as a shallow water discharge. Therefore, effluent limitations are calculated assuming no dilution (D=0).

32. ***Dilution Ratio:*** The Basin Plan contains effluent limitations for selected toxic pollutants such as heavy metals, including more stringent limits for discharges to shallow waters where effluent does not receive a minimum initial dilution of ten to one. The shallow water toxic substance effluent limits are based on a dilution ratio of zero. For cases where compliance with the limits, located in the 1995 Basin Plan (Table 3-4)), is not being achieved, the Basin Plan includes criteria under which a Discharger may apply for an exception to the assigned dilution ratio of zero. Exceptions are considered only where an aggressive pretreatment program is in place, and compliance with water quality objectives is obtained in the receiving waters.

33. **Reasonable Potential Analysis**:

As specified in 40 CFR 122.44(d)(1)(i), permits are required to include limits for all pollutants "which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard." Using the method in SIP and USEPA guidance documents, the Discharger has analyzed the effluent data to determine if the discharges had reasonable potential (RP) to cause or contribute to an exceedance of a State water quality objective. Review of the 1996-1999 data showed that the toxic constituents present in the Discharger's effluent at concentrations greater than the detection limit were mercury, zinc, copper, chloroform, polychlorinated biphenols, nickel, cyanide, and chromium. Of these constituents, only mercury and zinc has reasonable potential to cause or to

contribute to exceedance of water quality objectives based on the RP analyses. All of the other toxic constituents were found at levels well below the corresponding water quality objectives. The RP analyses conservatively assumed the effluent would receive no dilution.

Reasonable Potential Determination The RP analysis involves identifying the observed maximum pollutant concentration in the effluent (MEC) for each constituent, based on the effluent concentration data for the past three years after examination of the data to ensure that the data are representative and statistically defensible. In accordance with the SIP, section 1.3, the RP analysis for all constituents is based on zero dilution. The lowest WQO is adjusted for pH, hardness and translator data and the MEC and adjusted WQO are compared to each other. If the MEC is greater than the adjusted WQO, then an effluent limit is required.

For several constituents, cyanide, aldrin, dieldrin, and PCBs, the interim limits are below the minimum levels achievable by the laboratory technique. In these cases, a non-detect or below detection limit at the minimum level demonstrates compliance with the Order.

Constituents that have background levels higher than their respective WQOs, require a WQBEL, according to RP analysis methodology set out in the SIP (Section 1.3). However, for certain constituents for which there is insufficient data, interim requirements are established to provide data to determine (1) whether effluent limitations are needed, and (2) what the effluent limitations should be. These interim requirements include: continued monitoring and participation in studies to improve sampling and analytical techniques which would result in lower detection limits.

34. **Ammonia Limits**

The concentration of un-ionized ammonia in the Discharger's marsh and Peyton Slough which results from the effluent discharge fluctuates with the natural background pH and temperature of the marsh. While the pH and temperature fluctuation in a shallow slough is, for the most part, a natural phenomenon, it has made it difficult for the Discharger to consistently comply with the unionized ammonia receiving water quality objective specified in the Basin Plan.

A slough water quality survey conducted in 1986-87 concluded that partial removal of ammonia is necessary but total ammonia removal from the discharge is not necessary for maintenance of beneficial uses in Peyton Slough. Based on the results of this study, previous Orders replaced the receiving water objective for un-ionized ammonia with an effluent limit for ammonia. The effluent limit was established in order to maintain then current ammonia loading to the slough. This Order includes an effluent limit for ammonia, but does not specify a receiving water objective for un-ionized ammonia.

35. **Total Maximum Daily Load (TMDL)**

Based on the final 1998 Water Quality- Limited Waterbodies (303(d)) list, the Board may adopt Total Maximum Daily Loads and wastewater allocations which may result in revising the Water Quality Based Effluent Limits (WQBELs) established in this Order. The Board's plan for conducting these reviews, collecting data and developing TMDLs is prioritized in the final 303(d) list and incorporated into the Watershed Management Initiative for implementation.

The following summarizes the Board's strategy to collect water quality data and general approaches to policy and TMDL development with associated time frames, and funding mechanism for this work:

Data collection: The Board may require individual point and non-point Dischargers or Dischargers collectively to develop analytical techniques capable of detecting these pollutants at levels of

concern and to characterize loadings from their facilities into the water quality-limited

waterbodies. The results will be used to (1) revise the 303(d) list; and (2) support the watershed-specific pollutant policy development.

Policy and development: A region-wide Mercury TMDL will be adopted by the Board. The plan to adopt the Mercury TMDL will be considered by the Board as a Basin Plan amendment in 2002.

Funding mechanism: The board anticipates receiving resources from federal agencies for development of any alternate water quality based limits. The Board intends to supplement these resources to ensure timely alternate limits (TMDLs and WLAs) by allocating development costs among all Dischargers through Regional Monitoring Program (RMP) or other appropriate group funded mechanisms. The Discharger has shown a willingness to participate in such a Board initiated group effort as long as criteria are established to allocate the costs among Dischargers in the watershed equitably.

36. **Mercury**

a. *Mercury Water Quality Objectives.* For mercury, the existing Basin Plan objective and the national criterion are based on protection of human health. The objectives are intended to limit the bioaccumulation of methyl-mercury in fish and shellfish to levels which are safe for human consumption. As described in the Gold Book, the fresh water criterion is based on the Final Residual Value of 0.012 µg/L derived from the bioconcentration factor of 81,700 for methyl-mercury with the fathead minnow, which assumes that essentially all discharged mercury is methyl-mercury. This criteria is below levels that have produced acute and chronic toxicity in both fresh and marine water aquatic species. Impairment due to mercury, however, is based on fish tissue concentration and not water column toxicity.

The CTR adopted a saltwater mercury water quality objective of 0.051 µg/L for protection of human health. However, according to Footnote b. in CTR's Table of Criteria from Priority Toxic Pollutants, "Criteria apply to California waters except for those waters subject to objectives in Table III-2A and III-2B of the San Francisco Regional Water Quality Control Board's (SFRWQCB) 1986 Basin Plan." These objectives were adopted by the SFRWQCB and the State Water Resources Control Board, approved by EPA, and continue to apply.

The Board intends to work toward the derivation of a TMDL that will lead towards overall reduction of mercury mass loadings in the watershed. Based on these studies, the Board may amend this permit to specify a different limit for mercury.

b. ***Mercury Effluent Concentrations***: Effluent mercury concentrations measured in the discharger's effluent during the period of January 1996 to December 1999 effluent ranged from 0.002 µg/L to 0.019 µg/L, with an average below the 0.012 µg/L limit. Thus the Discharger would occasionally exceed an effluent limitation of 0.012 µg/L.

Improved (ultra-clean) sampling and analysis techniques have lowered the detection limit for mercury to below the 0.012 µg/L objective, and the discharger began using these techniques in 1996. The discharger will continue to use ultra-clean sampling and analysis techniques in order to gather additional accurate data on concentrations and mass loadings and ascertain the discharger's future ability to comply with future limits

c. ***Mercury as a Persistent Bioaccumulative Pollutant.*** Mercury is listed on the 303(d) list for impairing San Pablo Bay due to fish tissue level exceedances. In the event that a TMDL is not adopted by the Board by 2010, the final effluent limitation will be no net loading. This

would mean, that if a TMDL is not adopted by the Board by the scheduled date or that date has not been extended, the discharger will have the option of proposing a mass offset program, that would offset their mercury loads with source reductions which are not already required elsewhere in the system.

d. ***Mercury Strategy***. The Board staff is in the process of developing a plan to address control of mercury levels in San Francisco Bay including development of a TMDL. Presently, for constituents with a reasonable potential, the limit is based on the lower of the existing limit or its performance-based limit. The present limit does not provide a 10:1 dilution. When final limits are determined, there is no dilution for mercury since it is a 303 (d) listed pollutant.

. The Board staff is in the process of developing a TMDL report to address mercury compliance for the whole of San Francisco Bay. Review of recent data indicates that in the absence of dilution credit (as has been historically allowed for deep water dischargers) the discharge concentrations for these facilities may be higher than the objectives. Although the municipal dischargers are generally not considered to be significant contributors to the bulk mercury loading to the San Francisco Bay, the discharger is required to maximize their control over influent mercury sources, with consideration of relative costs and benefits.

e. ***Source Control***: The Discharger has conducted an intensive study to determine the sources of mercury and has implemented a source control program as necessary to comply with and reduce any significant, controllable sources that may be contributing to mercury toxicity in the receiving waters. Source control measures implemented by the Discharger included removal of the mercury seals from its biofilter mechanism and removal of a comminutor that also contained a mercury seal. The Discharger has also modified its treatment plant operation so as to maximize mercury removal. For mercury, the Board may consider an alternative control strategy that leads towards overall reduction of mercury mass loading in the watershed, as deemed necessary for protection of aquatic organisms and human health. The discharger is encouraged to continue working with other municipal dischargers to optimize both source control and pollution prevention efforts and to assess alternatives for reducing mercury loading to, and protecting beneficial uses of, receiving waters. .

f. ***Mercury Effluent Limits:*** At present, it appears that the most appropriate course of action is to apply interim mass loading limits to this discharge, and focus mercury reduction efforts on more significant and controllable sources. While site-specific objectives and TMDLs are being developed for mercury, the discharger will continue to help forestall any increase above current conditions in the receiving water by complying with performance-based mass emission limits for mercury. This permit includes interim effluent concentration and mass emission loading limits for mercury.

37. **Total and Fecal Coliform** .

The Basin Plan specifies water quality objectives for both total and fecal coliform to protect specific uses. To date, the effluent limitations for this discharge have been based on total coliform. The Basin Plan (Table 4- 2, footnote "d") allows the Board to substitute fecal coliform limits for total coliform limits, provided that it can be conclusively demonstrated through a program approved by the Board that such a substitution will not result in unacceptable adverse impacts on the beneficial uses of the receiving waters. This Order specifies a total coliform limit (as in the previous permit), but allows the Discharger to conduct a study to evaluate the feasibility of utilizing an effluent limit based on the fecal coliform objective. If the Discharger can demonstrate to the satisfaction of the Executive Officer, that the use of fecal coliform limits will not impair the beneficial uses of the receiving waters then the Executive Officer may allow use of the fecal coliform limits in lieu of total coliform limits.

38. **Chronic Toxicity**

a. Program History: The Basin Plan contains a narrative toxicity objective stating that "All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms" and that "there shall be no chronic toxicity in ambient waters." The Board initiated the Effluent Toxicity Characterization Program (ETCP) in 1986 with the goal of developing and implementing toxicity limits for each Discharger based on actual characteristics of both receiving waters and waste streams. Two rounds of effluent characterization were conducted by selected Dischargers beginning in 1988 and 1991. A second round was completed in 1995, and the Board is evaluating the need for a third round. Board guidelines for conducting toxicity test and analyzing results were published in 1988 and last updated in 1991.

Attempts have been made to include numeric chronic toxicity limits in NPDES permits. The Board adopted Order No. 92-104 in August 1992 amending the permits of eight Dischargers to include numeric chronic toxicity limits, based on an eleven sample median value of I TUc and 90th percentile value of 2 TUc. However, due to the court decision which invalidated the California Enclosed Bays and Estuaries Plan and Inland Surface Waters Plan, on which Order No. 92-104 was based, the SWRCB stated, by letter dated November 8, 1993, that the Regional Board will have to rescind the order. This letter also committed to providing the regional boards with guidance on issuing permits in the absence of the State Plans (Guidance for NPDES Permit Issuance, February 1994).

b. Regional Board Program Update. The Board intends to reconsider Order No. 92-104 as directed by the SWRCB, and to update, as appropriate, the Board's Effluent Toxicity (chronic and acute) program guidance and requirements. This will be done based on analysis of Discharger routine monitoring and ETCP results, and in accordance with current USEPA and SWRCB guidance. In the interim, decisions regarding the need for and scope of chronic toxicity requirements for individual Dischargers will continue to be made based on best professional judgment as indicated in the Basin Plan.

c. Discharger Monitoring and Permit Requirements. The Discharger is currently participating in the ETCP and has completed the screening phase portion of the program. The variability phase will begin after completion of the screening phase. Upon completion of the variability phase, when site specific criteria such as test species, effluent sampling procedures, dilution series, monitoring frequency, and dilution waters are known, this permit will be amended to include chronic toxicity effluent limitations and monitoring requirements.

SPECIAL STUDY – BACKGROUND DATA OF RECEIVING WATER

39. Ambient receiving water background data is required according to the SIP, in order to complete the RPA and to determine final effluent limits for zinc and mercury. The major dischargers are required to investigate alternative analytical procedures that result in lower detection limits. The Discharger may contribute to this either through participation in new RMP special studies or through equivalent studies conducted jointly with other dischargers.

SPECIAL STUDY – DIOXIN STUDY OF THE EFFLUENT

40. In accordance with the SIP, the major dischargers shall conduct effluent monitoring for the seventeen dioxin (2,3,7,8-TCDD) congeners. The purpose of the monitoring is to assess the presence and amounts of the congeners being discharged to inland surface waters, enclosed bays,

and estuaries for the development of a strategy to control these chemicals in a future multi-media approach.

POLLUTANT MINIMIZATION/POLLUTION PREVENTION PROGRAMS

41. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. In accordance with the SIP, dischargers shall be required to conduct a PMP in accordance with section 2.4.5.1 when there is evidence that the priority pollutant is present in the effluent above an effluent limitation and either:

    a. The discharger has established a Pollution Prevention Program under the requirements specified by the Regional Board.
    b. The discharger's Pollution Prevention Programs have resulted in a significant reduction of pollutants of concern discharged to the treatment plant and to the receiving waters.
    c. This reduction is reflected in its influent and effluent data.
    d. Section 2.4.5 of the SIP specifies under what situations and on which priority pollutant(s) (i.e., reportable priority pollutant(s)) the discharger shall be required to conduct Pollution Minimization Program in accordance with Section 2.4.5.1.
    e. There will be some redundancy between the Pollution Prevention Program and the Pollutant Minimization Program, if required.
    f. To the extent where the requirements of the two Programs overlap, the discharger is allowed to continue/modify/expand its existing Pollution Prevention Programs to satisfy the Pollutant Minimization Program requirements.

STORM WATER DISCHARGE

42. All stormwater from the plant site is conveyed to the plant headworks, treated and discharged with the effluent.

CEQA AND PUBLIC NOTICE OF ACTION

43. This Order serves as an NPDES Permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resource Code [California Environmental Quality Act (CEQA)] pursuant to Section 13389 of the California Water Code.

44. The Discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity to submit their views and recommendations.

45. The Board, in a public hearing, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and to the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, that the Discharger shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. Discharge of treated wastewater at a location or in a manner different from that described in findings of this Order is prohibited.

2. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited, unless otherwise allowed by an exemption. An exception to the prohibition is granted for this discharge provided the Discharger continues to provide a net environmental benefit by managing 89 acres of marshlands.

3. The bypass or overflow of untreated or partially treated wastewater to waters of the State, either at the treatment plant or from the collection system or pump stations tributary to the treatment plant, within the reasonable control of the District is prohibited, except that individual treatment processes may be bypassed during periods of high wet weather flows, provided that the combined discharge of fully treated and partially treated wastewater fully complies with the effluent limitations contained in this Order.

4. The average dry weather flow discharge shall not exceed 3.2 mgd. The average dry weather flow shall be determined over three consecutive dry weather months each year.

5. Neither the treatment, nor the discharge of reclaimed wastewater nor the management of the Marsh shall create a nuisance as defined in Section 13050(m) of the California Water Code.

B. EFFLUENT LIMITATIONS

The term "effluent" in the following limitations means the fully treated wastewater effluent from the Discharger's wastewater treatment facility, as discharged to the Discharger's marsh/wetlands and Peyton Slough.

1. **Conventional Pollutants Effluent Limitations :**

Table 1 - Conventional Pollutants Effluent Limitations

Constituent	*Units*	*30-Day (Monthly) Average*	*7-Day (Weekly) Average*	*Daily Maximum*
A. Biochemical Oxygen Demand (BOD_5, 20°C)	mg/L	30	45	--
B. Total Suspended Solids	mg/L	30	45	--
C. Settleable Matter	ml/L-hr	0.1	--	0.2
D. Oil & Grease	mg/L	10	--	20

2. **Ammonia:** The ammonia in the discharge shall not exceed 8.0 mg/l total ammonia on a monthly average basis and shall not exceed 6.0 mg/l total ammonia on an annual average basis.

3. **pH:** The pH of the discharge shall not exceed 9.0 nor be less than 6.0.

4. **Total Coliform Bacteria:** The treated wastewater, at some place in the treatment process prior to discharge, shall meet the following limits of bacteriological quality: The dry weather moving median value for the Most Probable Number (MPN) of total coliform bacteria in any five (5) consecutive samples shall not exceed 23 MPN/100 ml; and, any single sample shall not exceed 240 MPN/100 ml.

   During the wet weather months from November 1st through April 30th, if any samples are taken on days when the average daily flows exceed the current dry weather average daily

flows, the following limits of bacteriological quality applies: The moving median value for the Most Probable Number (MPN) of total coliform bacteria in any five (5) consecutive samples shall not exceed 240 MPN/100ml and any single sample shall not exceed 10,000 MPN/100 ml.

5. **85 Percent Removal, BOD5 and TSS:** The arithmetic mean of the biochemical oxygen demand (Five-day, 20°C) and total suspended solids values, by weight, of effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, of influent samples collected at approximately the same times during the same period

6. **Interim Effluent Limitations:** Table 3 shows the interim limits and shall apply until effluent limitations calculations can be performed.

Table 3 - Interim Limits (a, c)

	Constituent / CTR #	Monthly Average, µg/L (b)
	Zinc	70 (d)
	Mercury	0.019

Notes:

a. These limits are based on current plant performance, and are intended to be achieved through secondary treatment and, as necessary, source control.
b. Limits apply to the average concentration of all samples collected during the averaging period (Daily - 24-hour period; Monthly - Calendar month).
c. All analyses shall be performed using current USEPA Methods, as specified in USEPA Water/Wastewater Methods (EPA-600 Series), except that mercury analyses shall be performed using USEPA Method 1631 (ultra-clean method). Metal limits are expressed as total recoverable metals.
d. The final effluent limitation for Zinc will be 58 µg/L after August 16, 2005.

7. **Mercury Mass Loading Limits:** Until TMDL and WLA efforts for mercury provide enough information to establish a different WQBEL, the discharger shall demonstrate that the current mercury mass loading to the receiving water does not increase by complying with the following performance based mass emission limit.

Table 4 – Mercury Mass Emission

Constituent	Mass Emission
Mercury (1)	0.09 kg/month

Notes:

(1) Mercury analyses is to be performed using USEPA Method 1631.

a. Mass limit-Mercury: The mass limit (kilograms per month) was calculated from the 99.7 percentile of the 12-month moving average loads based on the treated effluent. The mass for each month was calculated by taking the average monthly flows (million gallons per day) times the corresponding average monthly concentration (micrograms per liter) over the past five years, times a conversion factor of 0.1151 (3.785 liters / gallon x 30.42 days / month x 1 kilograms / 1000 grams). The 12 month moving average was taken over the 60 month period and the 99.7 percentile of the 12 month moving average mass was used as the mass limit

b. Compliance-Mercury: Compliance shall also be determined based on moving average loads from flows and concentrations during the discharge period. This calculated, actual mass is compared to the limit.

The 99.7 percentile of the 12-month moving average mass emission rates shall be calculated as follows for compliance purposes:

Flow = Monthly average flow discharged, in million gallons per day (mgd).

Hg Conc. = Monthy average mercury concentration measurements in micrograms per liter (µg/L) corresponding to the above flow.

Monthly Average Mass Emission, in kg/month=Flow (mgd) x Hg Conc.(µg/L) x (3.785 liters/gallon) x (1 kilograms/1000grams) x (30.42days/month)

c. These mass emission limits will be superceded upon completion of a TMDL and WLA. According to the antibacksliding rule in the Clean Water Act, Section 402(o), the permit may be modified to include a less stringent requirement following completion of a TMDL and WLA, if the basis for an exception to the rule are met.

8. Acute Toxicity: Representative samples of the effluent shall meet the following limits for acute toxicity: (Provision 4.a-4.d. of this Order applies to these bioassays.)

a. The survival of organisms in undiluted effluent shall be an eleven (11) sample median value of not less than 90 percent survival; and,

b. An eleven (11) sample 90 percentile value of not less than 70 percent survival.

The eleven sample median and 90th percentile effluent limitations are defined as follows:

11 sample median : A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if five or more of the past ten or less bioassay tests show less than 90 percent survival.

90th percentile: A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit, if one or more of the past ten or less bioassay test show less than 70 percent survival.

C. RECEIVING WATER LIMITATIONS

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

a. Floating, suspended, or deposited macroscopic particulate matter or foam; or

b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses; or

c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels; or

d. Visible, floating, suspended, or deposited oil or other products of petroleum origin; or

e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State any place within one foot of the water surface (1):

   a. Dissolved Oxygen 5.0 mg/l, minimum

      The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, then the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.

   b. Dissolved Sulfide 0.1 mg/l, maximum

   c. pH Variation from normal ambient pH by more than 0.5 pH units.

   d. The discharge of nutrient laden waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

      (1) The treatment plant marsh, as with any natural marsh, is subject to periodic aquatic growths which may cause fluctuations in pH, dissolved oxygen, and nutrients which may be beyond the control of the Discharger.

3. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board may reopen, revise and modify this Order in accordance with such more stringent standards.

D. MARSH AND WETLANDS SPECIFICATIONS

1. The beneficial uses of the Discharger's marsh, Peyton Slough and adjacent wetland and marsh shall not be degraded as a result of the discharge from the treatment plant.

2. Marsh Management Plan

   The Discharger shall review, and update as necessary, its Marsh Management Plan, annually, or within 90 days of completion of any significant facility or process changes. The Discharger shall submit to the Board, by April 30 of each year, a letter describing the results of the review process including an estimated time schedule for completion of any revisions determined necessary, and a description or copy of any completed revisions.

3. Marsh Operation

   The Board expects the Discharger to operate and maintain the Marsh without chemical treatment (i.e., herbicides and algaecides) and to implement all feasible measures prior to using chemical treatment. If chemical treatment is proposed by the Discharger, then such treatment shall be in accordance with the provisions of the Basin Plan and approved by the Executive Officer.

E. SLUDGE MANAGEMENT PRACTICES

1. All sludge generated by the Discharger must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Part 503. All the requirements in 40 CFR 503 are enforceable by USEPA whether or not they are stated in an NPDES permit or other permit issued to the Discharger.

2. Sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.

3. Duty to mitigate: The Discharger shall take all reasonable steps to prevent or minimize any sludge use or disposal which has a likelihood of adversely affecting human health or the environment.

4. The discharge of sewage sludge shall not cause waste material to be in a position where it is, or can be carried from the sludge treatment and storage site and deposited in the waters of the State.

5. The sludge treatment and storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the temporary storage site. Adequate protection is defined as protection from at least a 100 year storm and protection from the highest possible tidal stage that may occur.

6. The Discharger is hereby notified that on February 19, 1993, the USEPA issued the final rule for the use and disposal of sewage sludge (40 [Code of Federal Regulations] (CFR) Part 503). This rule requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The Discharger is advised to contact USEPA regarding compliance with 40 CFR Part 503.

7. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR 258. The Discharger's annual self-monitoring report shall include the amount of sludge disposed of, and the landfill(s) to which it was sent.

8. Permanent on-site sludge storage or disposal activities are not authorized by this permit. A report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencement of any such activity by the Discharger.

9. Sludge Monitoring and Reporting Provisions of this Board's standard Provisions and Reporting Requirements, dated August 1993, apply to sludge handling, disposal and reporting practices.

10. The Board may amend this permit prior to expiration if changes occur in applicable state and federal sludge regulations.

F. PROVISIONS

1. The Discharger shall comply with the limitations, prohibitions, and other provisions of this Order immediately upon adoption by the board, except as otherwise noted in this permit. The Board may reopen this permit to add numeric limits for any constituent that in the future exhibits reasonable potential to cause or contribute to violations of applicable water quality objectives. Requirements prescribed by this Order supersede the requirements prescribed by Order No. 93-001. Order No. 93-001 is hereby rescinded.

2. **Compliance with Acute Toxicity Effluent Limitations**

a. Compliance with Acute Toxicity Effluent Limitation of this Order shall be evaluated by measuring survival of a test species exposed to undiluted effluent for 96 hours in flow-through bioassay.

b. The Executive Officer has approved fathead minnows for use in acute toxicity testing based on documentation provided by the Discharger.

c. All bioassays shall be performed according to protocols approved by the USEPA or State Water Resources Control Board, or published by the American Society for Testing and Materials (ASTM) or American Public Health Association.

d. Definition: Compliance with the Basin Plan narrative chronic toxicity objective shall be demonstrated according to the following tiered requirements based on results from representative samples of the treated final effluent meeting test acceptability criteria:

1). routine monitoring;

2). accelerated monitoring (bi-weekly) after exceeding a three sample median value [(1)] (TUc) or a single sample maximum of 20 TUc or greater. Accelerated monitoring shall consist of monitoring at frequency intervals of one half the interval given for routine monitoring in the SMP of this Order;

3). return to routine monitoring if accelerated monitoring does not exceed either "trigger" in "2", above;

4). initiate approved toxicity identification evaluation/toxicity reduction evaluation (TIE/TRE) workplan if accelerated monitoring confirms consistent toxicity above either "trigger" in "2", above;

5). return to routine monitoring after appropriate elements of TRE workplan are implemented and either the toxicity drops below "trigger" level in "2", above or , based on the results of the TRE, the Executive Officer authorizes a return to routine monitoring.

Footnote[(1)] A TUc equals 100 divided by the no observable effect level (NOEL). The NOEL is determined from IC, EC, or NOEC values. Monitoring and TRE requirements may be modified by the Executive Officer in response to the degree of toxicity detected in the effluent or in ambient waters related to the discharge.

3. **Special Study – Dioxin Study of the Effluent**

In accordance with the SIP, major dischargers shall conduct effluent monitoring for the seventeen 2, 3, 7, 8-TCDD congeners listed below. The purpose of the monitoring is to assess the presence and amounts of the congeners being discharged to inland surface waters, enclosed bays, and estuaries for the development of a strategy to control these chemicals in a future multi-media approach. Major dischargers are required to monitor the effluent once

during the dry season and once during the wet season for a period of three consecutive years. The following Toxicity Equivalence Factor (TEF) shall be used by the discharger to determine Toxic Equivalence (TEQ).

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
1, 2,3,7,8-penta CDD	1.0
1, 2, 3, 4, 7, 8-HexaCDD	0.1
1, 2, 3, 6, 7, 8-HexaCDD	0.1
1, 2, 3, 7, 8,9-HexaCDD	0.1
1, 2, 3, 4, 6, 7, 8-HeptaCDD	0.01
octa CDD	0.0001
2,3,7,8-Tetra CDF	0.1
1,2,3,7,8-Penta CDF	0.05
2,3,4,7,8-Penta CDF	0.5
1, 2, 3, 4, 7, 8-HexaCDF	0.1
1, 2, 3, 6, 7, 8-HexaCDF	0.1
1, 2, 3, 7, 8, 9-HexaCDF	0.1
2, 3, 4, 6, 7, 8-HexaCDF	0.1
1, 2, 3, 4, 6, 7, 8-HeptaCDF	0.01
1, 2, 3, 4, 7, 8,9-HeptaCDF	0.01
octa CDF	0.0001

Tasks	Compliance Schedule
a. Submit a proposed sampling plan, acceptable to the Executive Officer, to sample the effluent for seventeen congeners. This submittal shall include a proposed plan and time schedule for performing the work.	1 year after permit adoption
b. Following approval by the Executive Officer, commence work in a timely fashion in accordance with the sampling plan.	30 days after approval of study plan
c. Submit a report, to the Board, documenting the work performed in the sampling plan for the seventeen congeners.	Annually for 3 consecutive years

4. **Pollutant Minimization Program (PMP)**

   a. The discharger shall continue to implement and improve its existing Pollution Prevention Program in order to reduce pollutant loadings to the treatment plant and therefore to the receiving waters.

   b. The discharger shall submit an annual report, acceptable to the Executive Officer, no later than August 30th of each calendar year. Annual reports shall cover July of the preceding year through June of the current year.

      Annual report shall include at least the following information:

      i. *A brief description of its treatment plant, treatment plant processes and service area.*
      ii. *A discussion of the current pollutants of concern.* Periodically, the discharger shall analyze its own situation to determine which pollutants are currently a problem and/or which pollutants may be

potential future problems. This discussion shall include the reasons why the pollutants were chosen.

iii. *Identification of sources for the pollutants of concern.* This discussion shall include how the discharger intends to estimate and identify sources of the pollutants. The discharger should also identify sources or potential sources not directly within the ability or authority of the discharger to control, such as pollutants in the potable water supply and air deposition.

iv. *Identification of tasks to reduce the sources of the pollutants of concern.* This discussion shall identify and prioritize tasks to address the discharger's pollutants of concern. Tasks can target its industrial, commercial, or residential sectors. The discharger may implement tasks themselves or participate in group, regional, or national tasks that will address its pollutants of concern. The discharger is strongly encouraged to participate in group, regional, or national tasks that will address its pollutants of concern whenever it is efficient and appropriate to do so. A time line shall be included for the implementation of each task.

v. *Implementation and continuation of outreach tasks for District employees.* The discharger shall implement outreach tasks for District employees. The overall goal of these tasks is to inform employees about the pollutants of concerns, potential sources, and how they might be able to help reduce the discharge of pollutants of concerns into the treatment plant. The discharger may provide a forum for employees to provide input to the Program.

vi. *Implementation and continuation of a public outreach program.* The discharger shall implement a public outreach program to communicate pollution prevention to its service area. Outreach may include participation in existing community events such as county fairs, initiating new community events such as displays and contests during Pollution Prevention Week, implementation of a school outreach program, conducting plant tours, and providing public information in newspaper articles or advertisements, radio, television stories or spots, newsletters, utility bill inserts, and web site. Information shall be specific to the target audiences. The discharger should coordinate with other agencies as appropriate.

vii. *Discussion of criteria used to measure Program's and tasks' effectiveness.* The discharger shall establish criteria to evaluate the effectiveness of its Pollution Prevention Program. This shall also include a discussion of the specific criteria used to measure the effectiveness of each of the tasks in item b. (iv), b. (v), and b. (vi).

viii. *Documentation of efforts and progress.* This discussion shall detail all of the discharger's activities in the Pollution Prevention Program during the reporting year.

ix. *Evaluation of Program's and tasks' effectiveness.* This discharger shall utilize the criteria established in b. (vii) to evaluate the Program's and tasks' effectiveness.

x. *Identification of specific tasks and time schedules for future efforts.* Based on the evaluation, the discharger shall detail how it intends to continue or change its tasks in order to more effectively reduce the amount of pollutants to the treatment plant, and subsequently in its effluent.

c. According to Section 2.4.5.1 of the SIP when there is evidence that a priority pollutant is present in the effluent above an effluent limitation and either:

1. A sample result is reported as detected, but not quanitified (less than the Minimum Level) and the effluent limitation is less than the reported Minimum Level; or

2. A sample result is reported as not detected (less than the Method Detection Limit) and the effluent limitation is less than the Method Detection Limit,
the discharger shall be required to expand its Pretreatment and Pollution Prevention Programs that meet the Pollutant Minimization Program by including the "reportable priority pollutant". A priority pollutant becomes a reportable priority pollutant when there is evidance that it is present in the effluent above an effluent limitation and either c.1. or c.2. is triggered.

d. When there is evidence that a priority pollutant is present in the effluent above an effluent limitation, the discharger's Pollution Prevention Program shall also include:

i. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling; or alternative measures approved by the Executive Officer when it is demonstrated that source monitoring is unlikely to produce useful analytical data;
ii. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system, or alternative measures approved by the Executive Officer when it is demonstrated that influent monitoring is unlikely to produce useful analytical data;
iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
iv. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
v. An annual status report that shall be sent to the RWQCB including:

1. All monitoring results for the previous years;
2. A list of potential sources of the reportable priority pollutant(s);
3. A summary of all actions undertaken pursuant to the control strategy; and
4. A description of actions to be taken in the following year.

e. To the extent where the requirements of the two Programs overlap, the discharger is allowed to continue/modify/expand its existing Pollution Prevention Program to satisfy the Pollutant Minimization Program requirements. :

f. These Program requirements are not intended to fulfill the requirements in The Clean Water Enforcement and Pollution Prevention Act of 1999 (Senate Bill 709). :

5. **Zinc Special Study**

The discharger shall implement an aggressive source control and pollution prevention program to identify sources and evaluate options for control and reduction of loadings for zinc. The pollution prevention program shall consider reductions in effluent concentrations achieved through source control and economically feasible optimization of treatment plant processes. This program shall be developed and implemented in accordance with the following time schedule.

Task	Compliance Date
(1) Source Control and Reduction Study Plan	6 months after permit adoption

Submit a proposed Study Plan, to be approved by the Executive Officer, to investigate sources and reduction measures for zinc. The investigation shall include 1) evaluating possible means by which any significant sources can be reduced, 2) investigating means of optimizing the removal of these constituents by treatment plant processes, 3) assessing the feasibility of controlling effluent loadings through: improving education and outreach; reducing infiltration and inflow; and increasing reclamation and reuse of treated effluent. This Study Plan shall include proposed actions and a time schedule for their implementation.

(2) Study Commencement	30 days after approval of study plan by Executive Officer

Commence work in accordance with Study Plan and time schedule submitted pursuant to Task (2) above.

(3) Interim report	6 months after Study commencement

Submit an interim report, to be approved by the Executive Officer, documenting the initial findings of source reduction options, and past and proposed efforts to encourage minimization of sources of these constituents.

(4) Final Report	12 months after approval of Interim Report by Executive Officer

Submit a final report, acceptable to the Executive Officer, documenting the findings of source reduction work and efforts made to minimize these constituents in the treated effluent. This report shall include assessment of the feasibility of controlling effluent loadings through, at a minimum: identifying and reducing sources, optimizing treatment plant performance, improving public education and outreach, reducing infiltration and inflow, and increasing reclamation and reuse of treated effluent.

6. **Wet Weather Compliance**

In reviewing compliance with 85% removal for BOD5 and TSS of this Order, the Board will take into consideration difficulties encountered in achieving compliance during periods of extreme wet weather when ordinary treatment plant removal efficiencies are impeded by less concentrated influent resulting from stormwater dilution.

7. **Wet Weather Overflows**

In reviewing compliance with wet weather overflows of this Order, the Board will take into consideration the Discharger's efforts to control wet weather overflows in accordance with the Basin Plan's strategy for control of wet weather overflows.

8. **Operations and Maintenance Manual**

The Discharger shall review, and update as necessary, its Operations and Maintenance Manual annually or within 90 days of completion of any significant facility or process changes. The Discharger shall submit to the Board, by April 30 of each year, a letter describing the results of the review process including an estimated time schedule for completion of any revisions determined necessary, and a description or copy of any completed revisions.

9. **Contingency Plan**

Annually, the Discharger shall review and update as necessary, its Contingency Plan as required by Board Resolution 74-10. The discharge of pollutants in violation of this Order where the Discharger has failed to develop and/or adequately implement a contingency plan will be the basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code. Plan revisions, or a letter stating that no changes are needed, shall be submitted to the Board by April 30 of each year.

10. **Primary Responsibility For Operation**

The Discharger shall implement a program to regularly review and evaluate its wastewater collection, treatment and disposal facilities in order to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, in order to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's service responsibilities. A Treatment Facilities Evaluation Program report discussing the status of this evaluation program, including any recommended or planned actions, shall be submitted to the Board by April 30 of each year.

11. **Self-Monitoring Program**

The Discharger shall comply with the Self-Monitoring Program for this order, as adopted by the Board and as may be amended by the Executive Officer.

12. **Standard Provisions**

The Discharger shall comply with all **applicable** items of the attached "Standard Provisions and Reporting Requirements " dated August 1993 (attached). In the event that there is a conflict between the permit and the Standard Provisions, the permit requirements will supercede the Standard Provisions.

13. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

14. To assume operation of this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. (Refer to Standard Provisions, referenced above). The request must contain the requesting entity's full legal name, the address and telephone number of the persons responsible for contact with the Board and a statement. The statement shall comply with the signatory paragraph described in Standard Provisions and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code.

15. **Reopener**

The Board may modify, or revoke and reissue, this Order and Permit if present or future investigations demonstrate that the Dischargers governed by this Order are causing or significantly contributing to adverse impacts on water quality and/or beneficial uses of the receiving waters.

In the event that the Board's interpretation of the narrative toxicity objective is modified or invalidated by a State Water Resources Control Board order, a court decision, or State or Federal statute or regulation, the effluent limitations for toxic pollutants contained in this Order may be revised to be consistent with the order, decision, statute or regulation.

In addition the Board may consider revising this Permit to make it consistent with any State Board decisions arising from various petitions for re-hearing, and litigation concerning the state implementation plan, 303(d) list, and the TMDL program.

16. **Order Expiration and Renewal**

This Order expires on August 16, 2005. The Discharger must file a report of waste discharge in accordance with Title 23, Division 3, Chapter 9, Article 3 of the Administrative Code not later than 180 days before this expiration date as application for reissuance of waste discharge requirements.

17. **Effective Date of Permit**

This Order shall serve as a NPDES permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective upon the date of its adoption provided the Regional Administrator, United States Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

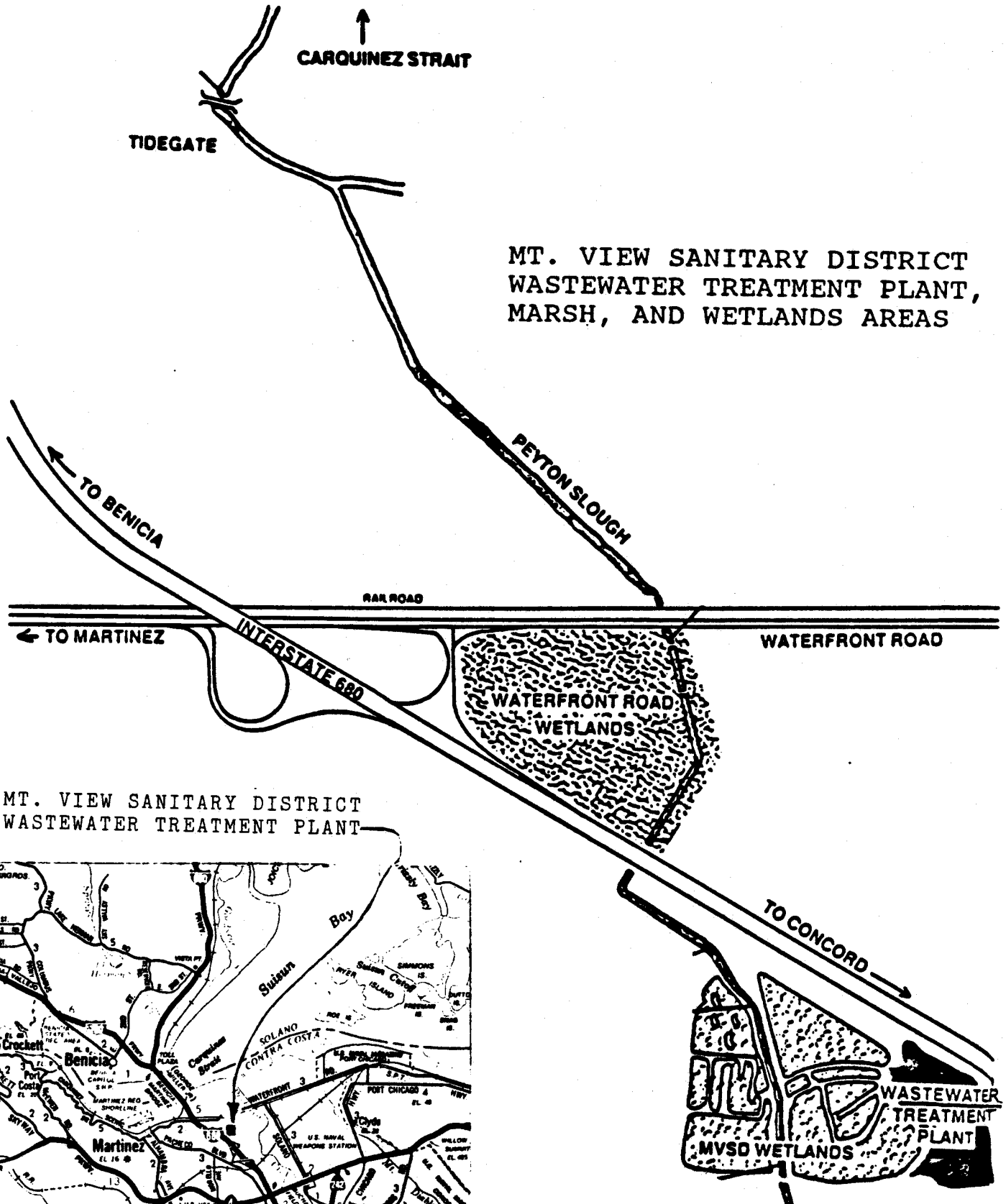
I, Lawrence P. Kolb, Acting Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on August 16, 2000.

LAWRENCE P. KOLB
Acting Executive Officer

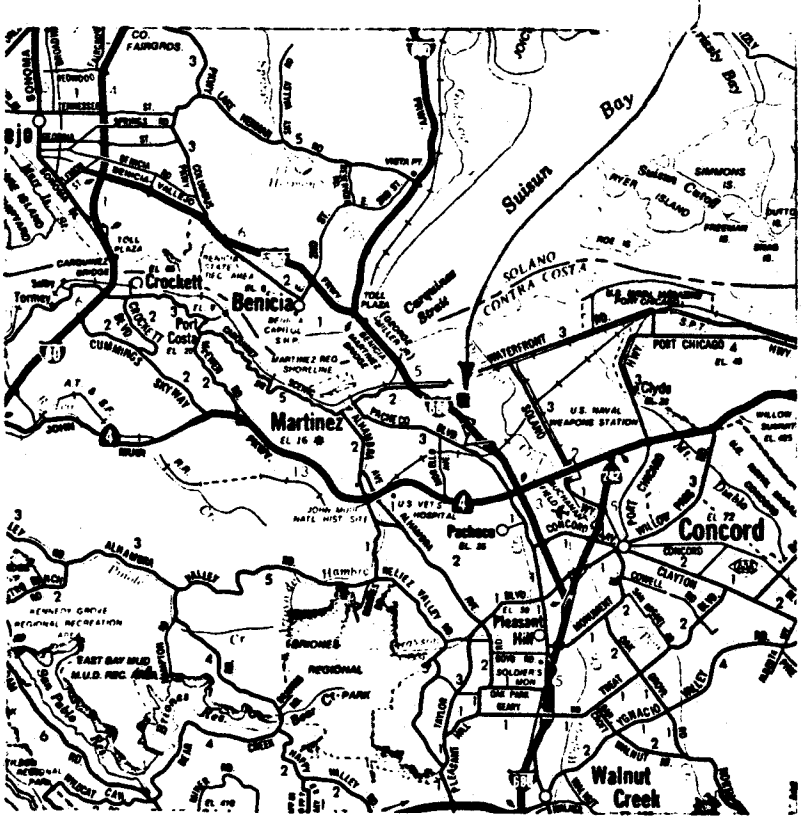
Attachments:

A. Location/Site Maps
B. Self-Monitoring Program
C. Standard Provisions and Reporting Requirements - August 1993
D. Contingency Plan - Resolution 74-10

MT. VIEW SANITARY DISTRICT WASTEWATER TREATMENT PLANT, MARSH, AND WETLANDS AREAS



MT. VIEW SANITARY DISTRICT
WASTEWATER TREATMENT PLANT



STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION		
MT. VIEW SANITARY DISTRICT LOCATION MAP ATTACHMENT A		
DRAWN BY: KRH	DATE 12/8/92	DRWG. NO.

ATTACHMENT B

SELF-MONITORING REPORT

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

MT. VIEW SANITARY DISTRICT
MARTINEZ, CONTRA COSTA COUNTY

NPDES PERMIT NO. CA 0037770

ORDER NO. 00-086

CONSISTS OF

PART A (August 1993)

AND

PART B

PART B

SELF-MONITORING PROGRAM
for
MT. VIEW SANITARY DISTRICT
NPDES Permit No. CA 0037770

I. DESCRIPTION OF SAMPLING STATIONS

Note: A sketch showing the locations of the stations described below shall accompany each monthly report, and the Annual Report for each calender year.

A. INFLUENT

Station	Description
A-1	At any point in the treatment facilities headworks at which point all waste tributary to the system is present and prior to any phase of treatment.

B. EFFLUENT

Station	Description
E-1	At any point in the outfall from the treatment facilities between the point of discharge and the point at which all waste tributary to that outfall is present (see attached Location Map).
E-1-D	At any point in the disinfection facilities for flow E-1, at which point adequate contact with disinfectant is assured.

C. MARSH RECEIVING WATERS

Station	Description
M-A	In the discharge stream from marsh plot A to Peyton Slough.
M-B	In the discharge stream from marsh plot B to Peyton Slough.
M-E	McNabney Marsh on east side of Highway I-680 south of Waterfront Road.
M-W	Constructed wetlands on the west side of Highway I-680.

D. PEYTON SLOUGH

Station	Description
C-R	At any point in Upper Peyton Slough, located upstream of the Pond A discharge weir.
C-1	At a point in Upper Peyton Slough, located within 50 feet downstream of the Pond B discharge weir.

C-2	At any point in Upper Peyton Slough, located at the downstream headwall of the culvert under Interstate 680.
C-3	At a point in Upper Peyton Slough, located 30 feet upstream of the culvert under Waterfront Road.
C-4	At a point in Upper Peyton Slough, located downstream of the Tide Gate.

E. LAND OBSERVATIONS

Station	Description
L- 1 thru P-'n'	Located along the periphery of the of the waste treatment facilities at equidistant intervals, not to exceed 200 feet. (A sketch showing the locations of these stations will accompany each annual report).

F. OVERFLOWS AND BYPASSES

Station	Description
O-1 thru O-'n'	At points in the collection system including manholes, pump stations, or any other location where overflows and bypasses occur.

G. SLUDGE

The discharger shall chemically analyze sludge as necessary to comply with requirements for landfill disposal, or for reuse and/or disposal of sludge ash.

II SCHEDULE OF SAMPLING AND ANALYSIS

A. The schedule of sampling and analysis shall be that given in Table 1 (attached).

B. Sample collection, storage, and analyses shall be performed according to requirements in the latest 40 CFR 136, in the Permit, or as specified by the Executive Officer.

III. MODIFICATIONS TO PART A & STANDARD PROVISIONS AND REPORTING REQUIREMENTS

A. Self-Monitoring Report - Part A, dated August 1993

1. This monitoring program does not include the following sections of Part A: C.3, C.5, and E.3.

2. The second sentence of Section F.1, Spill Reports, is revised to read as follows: "Spills shall be reported to this Regional Board (510 622-2300 on weekdays during office hours from 8 a.m. to 5 p.m.), and to the Office of Emergency Services (800-852-7550) during non office hours) immediately after the occurrence.

   Section F.1.b is revised to read: "Best estimate of volume involved".
   Section F.1.d is revised to read: "Cause of spill or overflow".

Section F.1.i is revised to read: "Agencies or persons notified".

3 The following paragraph shall replace Paragraph D.3:

Marsh Habitat

Special attention shall be paid to observations for vector nuisance and signs of waterfowl botulism in the marshes.

4. Paragraph F.5 should include the following addition:

"The annual Report narrative (and data as appropriate) should stress the operations of the marsh to meet water quality objectives, enhance beneficial uses of reclaimed wastewater, protection of off-site beneficial uses, and net environmental benefits."

5. Paragraph G.5 is revised to read:

"Average monthly values are calculated as the sum of all measured discharges by weight (measured during the specified period, i.e. calendar month) divided by the number of daily discharge values measured during that specified period."

B. Standard Provisions & Reporting Requirements

1. This monitoring program does not include the following sections: B (Storm Water Reporting)

2. An Annual Report for each calendar year shall be submitted to the Board by March 1of the following year.

3. Section G, Definitions, No. 14, Overflows is revised to read as follows:

"Overflow is defined as the intentional or unintentional spilling or forcing out of untreated or partially treated wastes from a collection or transport system (e.g. collection points, sewer system manholes, pump stations) upstream from the treatment plant headworks caused by excess flows, capacity restrictions, stoppages (obstructions, blockages, and/or structural failure), and the actions of others."

IV. CHRONIC TOXICITY MONITORING REQUIREMENT

A. Test Species and Frequency:

The discharger shall collect 24 hour composite samples of treatment plant effluent at the compliance point station specified in Table 1 of this Self Monitoring Program, for critical life stage toxicity testing as indicated below. For toxicity tests requiring renewals, 24 hour composite samples collected on consecutive days are required.

Test Species	**Frequency**
Mysidopsis bahia (Mysid shrimp), or Pimephales promelas (Fathead minnow),	Quarterly (during discharge season)

(or other appropriate test species
approved by Regional Board staff)

B. Conditions for Accelerated Monitoring: The discharger shall accelerate the frequency of monitoring to monthly (or as otherwise specified by the Executive Officer) when there is an exceedance of either of the following conditions:

1. three sample median value of 10 TUc, or
2. single sample maximum value of 20 TUc

C. Methodology:

Sample collection, handling and preservation shall be in accordance with EPA protocols. The test methodology used shall be in accordance with the references cited in the Permit, or as approved by the Executive Officer. A concurrent reference toxicant test shall be performed for each test.

D. Dilution Series:

The discharger shall conduct tests at 100%, 50%, 25%, 12.5%, and 6.25%. The "%" represents percent effluent as discharged.

V. CHRONIC TOXICITY REPORTING REQUIREMENTS

A. Routine Reporting: Toxicity test results for the current reporting period shall include at a minimum, for each test

1. sample date(s)
2. test initiation date
3. test species
4. end point values for each dilution (e.g. number of young, growth rate, percent survival)
5. NOEC value(s) in percent effluent
6. IC15, IC25, IC40, and IC50 values (or EC15, EC25 ... etc.) in percent effluent
7. TUc values (100/NOEC, 100/IC25, and 100/EC25)
8. Mean percent mortality (ñs.d.) after 96 hours in 100% effluent (if applicable)
9. NOEC and LOEC values for reference toxicant test(s)
10. IC50 or EC50 value(s) for reference toxicant test(s)
11. Available water quality measurements for each test (ex. pH, D.O., temperature, conductivity, hardness, salinity, ammonia)

B. Compliance Summary:

The results of the chronic toxicity testing shall be provided in the most recent self monitoring report and shall include a summary table of chronic toxicity data from at least eleven of the most recent samples. The information in the table shall include the items listed above under Section A item numbers 1, 3, 5, 6 (IC25 or EC25), 7, and 8.

C. Reporting Raw Data in Electronic Format:

The discharger shall report all chronic toxicity data upon completion of chronic toxicity testing in the format specified in "Suggested Standardized Reporting Requirements for Monitoring Chronic Toxicity," February 1993, SWRCB. The data shall be submitted in high density, double sided 3.5 inch floppy diskettes, or electronically via e-mail.

VI. REPORTING REQUIREMENTS

A. General Reporting Requirements are described in Section C of the Board's "Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits", dated August 1993.

B. Self Monitoring Reports for each calendar month shall be submitted monthly, by the end of the following month in accordance with Section F.4 of Part A.

a.) An Annual Report for each calendar year shall be submitted to the Board by March 1 of the following year. The required contents of the Annual Report are described in Section F.5 of Part A.

D. Any overflow, bypass, or any significant non-compliance incident that may endanger health or the environment shall be reported in accordance with Sections F.1 and F.2 of Part A.

E. Flow Monitoring and Reporting.

Effluent (E-1, and E-1-D):

Daily effluent flows shall be measured continuously, and recorded. The following information shall also be reported, for each calendar month: Average, Maximum and Minimum Daily Flows (mgd).

F. Activities associated with marsh and wetland management shall be documented in the self-monitoring Reports on a quarterly basis.

VII. MISCELLANEOUS REPORTING

A. The discharger shall retain and submit (when required by the Executive Officer) the following information concerning the monitoring program for organic and metallic pollutants.

a. Description of sample stations, times, and procedures.

b. Description of sample containers, storage, and holding time prior to analysis.

c. Quality assurance procedures together with any test results for replicate samples, sample blanks, and any quality assurance tests, and the recovery percentages for the internal surrogate standard.

B. The discharger shall submit in the monthly self-monitoring report the metallic and organic test results together with the detection limits (including unidentified peaks). All unidentified (non-Priority Pollutant) peaks detected in the USEPA 624, 625 test methods shall be identified and semi-quantified. Hydrocarbons detected at <10 µg/L based on the nearest internal standard may be appropriately grouped and identified together as aliphatic, aromatic and unsaturated hydrocarbons. All other hydrocarbons detected at >10 µg/L based on the nearest internal standard shall be identified and semi-quantified.

Lawrence P. Kolb, Acting Executive Officer, herebys certify that the foregoing Self Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Order No. 00-086.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

LAWRENCE P. KOLB
Acting Executive Officer

Effective Date: August 16, 2000

Attachments:

Table 1: Schedule of Sampling, Measurement and Analysis

Part A, dated August 1993

MT. VIEW SANITARY DISTRICT
NPDES Permit No. CA0037770
Self-Monitoring Program, Attachment A

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS (1)

Sampling Station		A-1	E-1			M	C	L	O
Type of Sample Parameter, Units	Notes	C-24	G	C-24	C	G/Ob	G/Ob	Ob	G/Ob
Flow Rate (mgd)	(3)			D					
BOD_5 (mg/L & kg/d)		W		W					
Tot. Susp. Solids (mg/L & kg/d)		W		W					
Oil & Grease (mg/L & kg/d)	(4)	Y							
Total Coliform (MPN/100ml)				3/W					
Toxicity, 96 hr Bio (% Sruv)	(5)				M				
Turbidity (NTU)						2/Y	2/Y		
pH (units)			D			Q	Q		
Temperature °C						Q	Q		
D.O. (mg/L & % sat)						Q	Q		
Sulfides, Tot. & Disol. (if D.O. < 2.0 mg/L) (mg/L)						M	M		
Ammonia N (mg/L & kg/d)				M					
Un-ionized Ammonia (mg/L as N)						M(6)	M(6)		
Hardness (mg/L as $CaCo_3$)						Q	Q		
Standard Observations		D				M	M	W	E
Arsenic, Cadmium, Chromium, Nickel, Selenium, Cyanide, Toxic constituents	(10)			Y					
Lead, Silver				Q					
Copper, Mercury, Zinc							M		
Table 2 Constituents			2Y	As Indicated in Table 2 (attached)					

LEGEND FOR TABLE 1:

Types of Samples	Frequency of Sampling	
G = grab sample	D	Once each day
C-24 = 24-hour composite	W	Once each week
C = Continuous	M	Once each month
Ob = Observations	Y	Once each year
	Q	Once each calendar quarter (with at least two month intervals)
	E	Each occurrence

Type of Stations	Frequency of Sampling	
A = Treatment Plant Influent	D = once each day	3/W = three days per week
E = Treatment Plant Effluent	W = once each week	2/Y = once in March & Sept
M = Marsh Receiving Water	M = once each month	
P = Peyton Slough	Y = once each year	
L = Land Observations	E = each occurrence	
0 = Overflow and Bypass Points	C = Continuous	

TABLE 2
Monitoring Frequency for Priority Pollutants
All Analyses are Twice Annually

Constituent	Notes
1, 2 - Dichlorobenzene	
1, 3 - Dichlorobenzene	
1, 4 - Dichlorobenzene	
2, 4 - Dichlorophenol	
2, 4, 6 - Trichlorophenol	
4 - Chloro - 3 - Methylphenol	
Aldrin	
A-BHC	
Benzene	
B - BHC	
Chlordane	
Chloroform	
DDT	
Dichloromethane	
Dieldrin	
Diazinon	
Endosulfan	
Endrin	
Fluoranthene	
G - BHC (Lindane)	
Halomethanes	
Heptachlor	
Heptachlor Epoxide	
Hexachlorobenzene	
PAHs	(7)
Phenols	

PCB's	(8)
Pentachlorophenol	
TCDD Equivalents	(9)
Toluene	
Toxaphene	
Tributlytin	(10)

FOOTNOTES FOR TABLE I and TABLE 2:

(1) If any effluent is in violation of limits, except those for metals, cyanide, and organics, sampling shall be increased for that parameter to at least daily or greater until compliance is demonstrated in two successive samples. Receiving water violations shall be reported in the monthly report; increased receiving water monitoring may be required. Compliance measurements represent compliance status for the time period between measurements.

(2) Receiving water monitoring in Lower Peyton Slough shall be done during high tide.

(3) Flow Monitoring: Daily effluent flows shall be measured continuously, and recorded. The following information shall also be reported, monthly:

Daily:	Daily Flow (MG)
Monthly:	Average Daily Flow (MGD)
Monthly:	Maximum Daily Flow (MGD)
Monthly:	Minimum Daily Flow (MGD)
Monthly:	Total Flow Volume (MG)

(4) Oil & Grease: Each Oil & Grease sample shall consist of three grab samples taken at equal intervals, no less than two hours apart, during the sampling day. Each Grab sample shall be collected in a separate glass container, and analyzed separately. Results shall be expressed as a weighted average of the three values, based upon the instantaneous flow rates occurring at the time of each grab sample.

(5) Monitoring of the bioassay water shall include, on a daily basis, the following parameters: pH, dissolved oxygen, and temperature. These results shall be reported. If a violation of acute toxicity requirements occurs, bioassay testing shall continue back to back until compliance is demonstrated.

(6) Un-ionized Ammonia: Receiving water monitoring for un-ionized ammonia shall be done during the summer period of June, July and August. Sampling shall be performed twice a day - morning & afternoon.

(7) PAHs (Polvnuclear Aromatic Hydrocarbons): The discharger shall attempt to achieve the lowest detection limits commercially available. Polynuclear aromatic hydrocarbons, PAHS, shall be analyzed using the latest version of USEPA Method 6l0 (8100 or 8300). The discharger shall attempt to achieve the lowest detection limits commercially available. If an analysis cannot achieve a quantification limit for a particular sample at or below the effluent limits for PAHS, the discharger shall provide an explanation in its self- monitoring report. Note that the samples must be collected in amber glass containers. These samples shall be collected for the analysis of the regulated parameters. An automatic sampler which incorporates glass sample containers, and keeps the samples refrigerated at 4øC, and protected from light during compositing may be used.

The 24- hour composite samples may consist of eight grab samples collected at three-hour intervals. The analytical laboratory shall remove flow proportioned volumes from each sample vial or container for the analysis.

PAHs shall mean the following constituents. Each constituent shall be limited individually at 0.049 µg/L as indicated below. If any of these PAHs are detected in the annual sampling, quarterly monitoring shall begin.

Constituent (a)	Unit	Monthly Criteria (b)
1,2-Benzanthracene	µg/L	0.049
3,4-Benzofluoranthene	µg/L	0.049
Benzo(k)fluoranthene	µg/L	0.049
1,12-Benzoperylene	µg/L	0.049
Benzo(a)pyrene	µg/L	0.049
Chrysene	µg/L	0.049
Dibenzo[a,h]anthracene	µg/L	0.049
Indeno[1,2,3-cd]pyrene	µg/L	0.049

(a) The limit for PAHS, as defined by the Basin Plan, is the sum of about sixteen constituents measured in USEPA Method 610. The NTR, which is based on more updated data, list standards for just eleven of the PAHs measured in Method 610. The USEPA criteria for three of the eleven are higher than the other eight; these are anthracene (NTR objective at 10,000 ppb), fluorene (14,000 ppb), and pyrene (11,000 ppb). Therefore, the PAH limits in the current permit are for the other eight PAHs that may be present in the discharge at concentrations which pose a reasonable potential to contribute to water quality impacts.

b) USEPA human health criteria calculations from the TSD, with updated cancer potencies (q*) and reference doses (RfD) from the California Office of Environmental Health Hazard Assessment, and in USEPA's Integrated Risk Information System (IRIS). Calculations based on average human body weight of 70 kg, USEPA estimated national average fish consumption of 6.5 g/d, and a 10-6 cancer risk level for carcinogens.

(8) PCBS: (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-I 01 6, Aroclor- 1221, Aroclor- 1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

(9) Monitoring for TCDD Equivalents shall be done twice each year during the discharge period over the three year period 2000 through 2003. Thereafter, monitoring frequency shall be as specified by the Executive Officer. TCDD Equivalents shall mean the Chlorinated dibenzodioxins (2,3,7,8 - CDDs) and chlorinated dibenzofurans (2,3,7,8 CDFs) as listed below. Data submitted shall include detection limits and concentrations of each of the following:

2,3,7,8 - tetra CDD
I,2,3,7,8 - penta CDD
1,2,3,4,7,8 - hexa CDDs
1,2,3,4,6,7,8 - hexa CDDs
1,2,3,4,7,8-hexa CDF
1,2,3,6,7,8 -hexa CDF
2,3,4,6,7,8 -hexa CDF

PCL XL error

Subsystem: KERNEL

Error: IllegalOperatorSequence

Operator: SetBrushSource

Position: 15548